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TESTIMONY OF JEROLD H. RUBINSTEIN -
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GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

RECEIVED

Docket No. 96-5
CARP DSTR

TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

o I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

o The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

◦ Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

◦ It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

◦ I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Tele-Communications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

- a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirectTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirectTV DSS system attracted more than one million subscribers. Current estimates suggest that DirectTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting." Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

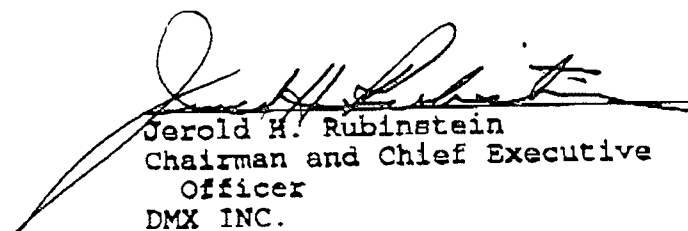
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.

INCLUDES CONFIDENTIAL RIAA MATERIAL

Before the
LIBRARY OF CONGRESS
COPYRIGHT OFFICE
Washington, D.C.

GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

RECEIVED

Docket No. 96-5
CARP DSTR

TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

- I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

- The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

• Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

• It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

• I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Telecommunications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

- a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirecTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirecTV DSS system attracted more than one million subscribers. Current estimates suggest that DirecTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting." Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

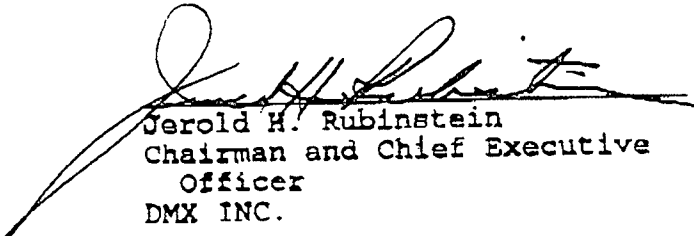
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.

INCLUDES CONFIDENTIAL RIAA MATERIAL

Before the
LIBRARY OF CONGRESS
COPYRIGHT OFFICE
Washington, D.C.

GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

RECEIVED

Docket No. 96-5
CARP DSTR

TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

o I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

o The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

- Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

- It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

- I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Tele-Communications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

- a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirecTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirecTV DSS system attracted more than one million subscribers. Current estimates suggest that DirecTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting."

Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

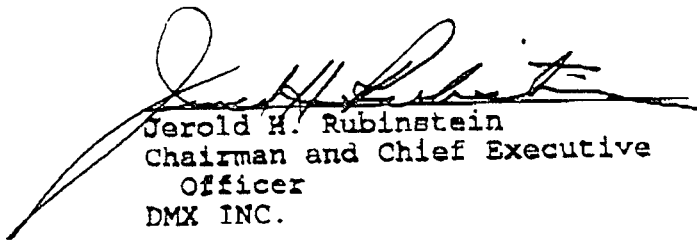
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.

INCLUDES CONFIDENTIAL RIAA MATERIAL

Before the
LIBRARY OF CONGRESS
COPYRIGHT OFFICE
Washington, D.C.

GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

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Docket No. 96-5
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TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

o I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

o The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

◦ Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

◦ It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

◦ I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Telecommunications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

- a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirecTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirecTV DSS system attracted more than one million subscribers. Current estimates suggest that DirecTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting." Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

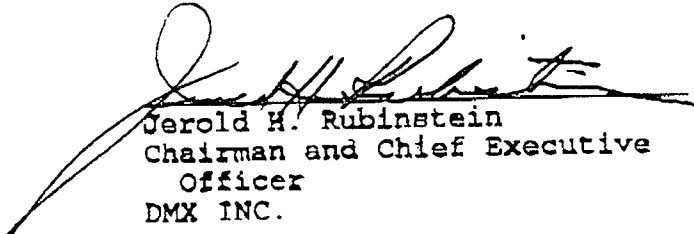
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.

INCLUDES CONFIDENTIAL RIAA MATERIAL

Before the
LIBRARY OF CONGRESS
COPYRIGHT OFFICE
Washington, D.C.

GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

RECEIVED

Docket No. 96-5
CARP DSTR

TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

o I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

o The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

• Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

• It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

• I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Tele-Communications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

- a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirecTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirecTV DSS system attracted more than one million subscribers. Current estimates suggest that DirecTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting." Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

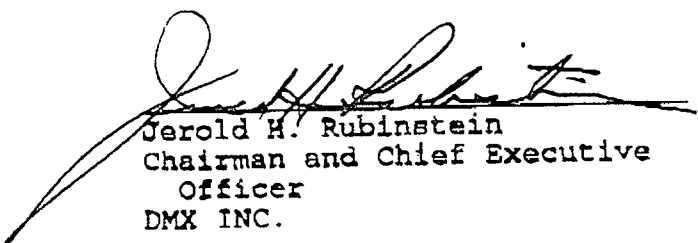
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.

INCLUDES CONFIDENTIAL RIAA MATERIAL

Before the
LIBRARY OF CONGRESS
COPYRIGHT OFFICE
Washington, D.C.

GENERAL COUNSEL
OF COPYRIGHT

SEP 24 1996

In the Matter of)
)
Statutory License Terms and)
Rates for Certain)
Digital Subscription)
Transmissions of Sound)
Recordings)
_____)

RECEIVED

Docket No. 96-5
CARP DSTR

TESTIMONY OF JEROLD H. RUBINSTEIN

I, Jerold H. Rubinstein, am testifying in this proceeding on behalf of DMX Inc., a Delaware corporation which operates the digital music subscription service known as Digital Music Express ("DMX"). The principal business office of DMX Inc. is located at 11400 West Olympic Boulevard, Suite 1100, Los Angeles, California 90064-1507.

To summarize my testimony:

o I am a CPA and attorney, former chief executive of two sound recording companies, ABC Records and United Artists Records, and a former member of the Board of Directors of the Recording Industry Association of America ("RIAA"). I am the founder, Chairman and Chief Executive Officer of DMX.

o The DMX digital audio subscription service for the residential consumer consists of up to 30 channels of uninterrupted musical programming across a wide spectrum of musical styles and genres. It is delivered primarily by direct broadcast satellite as a "basic" service, and by cable as a "premium" service.

• Using proprietary programming techniques, voluntary programming guidelines and innovative technologies, I designed DMX to promote the sale of sound recordings and exposure of performing artists.

• It has taken more than \$120 million to launch DMX and to guide the growth of DMX over the last 10 years through today. The costs of operating DMX are substantial, including the costs of acquiring satellite time, studio equipment and programming, sound recordings for a music library, sales and marketing, music licensing and computer systems. Unfortunately, start-up and ongoing operating costs have greatly outweighed subscriber revenues. DMX has sustained operating losses from its residential subscription services of more than \$82.3 million since its inception.

• I conceived of DMX in 1986 as a "premium" music service delivered by cable system operators. That model has changed. Competition by other digital subscription music services and the increasing popularity of direct broadcast satellite ("DBS") television has shifted the preponderance of DMX subscriptions to "basic" services. This shift substantially increased the DMX subscriber base but drastically reduced the per subscriber revenue. DMX anticipates that new delivery technologies, including DBS and telecommunications networks, will supplant as well as supplement DMX premium subscriptions. These technologies, as well as digital audio broadcasting, also will provide new price competition for digital music subscription services. DMX remains optimistic that its residential service

eventually will attain and sustain profitability, but that prospect remains elusive.

o In light of these and other considerations that I will describe below, and the existing license agreements between three recording companies and DMX's primary competitor, DMX believes that a just, reasonable and appropriate royalty rate for the performance license will be less than two percent (2%).

I. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I have held the position of Chairman and Chief Executive Officer of DMX Inc. (and, as DMX Inc. formerly was known, International Cablecasting Technologies Inc. ("ICT")) since 1986.

2. My current curriculum vitae is submitted as Exhibit 1. I earned my Bachelors of Science degree in 1960 from the University of California, Los Angeles, majoring in Business Management. In 1961, I became a Certified Public Accountant. I currently am a member in good standing of the American Association of Attorney-CPAs, the California Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

3. In 1964, I was awarded my Juris Doctor degree from Loyola School of Law, and was admitted to the Bar of the State of California. I currently am a member in good standing of the Bar of the State of California, the American Bar Association and the California Bar Association.

4. From 1959 through 1974, my professional career primarily focused on accounting and business management. During

1968 through 1974, I was a founder and partner in the accounting and business management firm of Segel, Rubinstein & Goldman, CPAs. I provided accounting and business advice to many prominent members of the entertainment industry including popular recording artists such as Crosby, Stills, Nash & Young, The Eagles, Kenny Loggins, Billy Joel, The Fifth Dimension and Joni Mitchell.

5. In 1975 through 1978, I became Chairman and Chief Executive Officer of the music division of the American Broadcasting Company ("ABC"). My primary responsibilities in that position involved the management of ABC Records, Dunhill Records and the music publishing division of ABC.

6. During my tenure at ABC, in 1975 and 1976, I was a member of the Board of Directors of the RIAA.

7. In 1978, I and a partner purchased United Artists Records. I served as Chairman and Chief Executive Officer for two years. I sold the company to EMI Records in 1980.

8. During my chairmanship of these record companies in the mid-1970s, the United States Congress was considering significant reforms to the Copyright Act. On several occasions I met with legislators and legislative staff to discuss the scope of copyright in sound recordings. I strongly advocated adoption of a performance right for commercial use of sound recordings -- a principle in which I consistently have believed. Last year I testified before the Senate Judiciary Committee and the House Subcommittee on Intellectual Property in connection with the Digital Performance Right in Sound Recordings Act of 1995 ("the

Act"). Although I recommended changes to the bills as introduced so as to better balance the rights of copyright owners and subscription services, I reaffirmed my belief in the principle of performance rights. This is reflected in the legislative history of the Act, which states:

Jerold Rubinstein, chairman of the Digital Music Express subscription audio service, testified before this Committee that even though he believes that certain digital subscription services effectively promote sales of sound recordings through the adoption of new identification technologies as well as by the exposure afforded to the performers and sound recordings, he also believes that sound recording copyright owners and recording artists deserve compensation for this use.

S. Rep. No. 104-128 at 15. Copies of my testimony before the Senate Judiciary Committee Subcommittee on Patents, Copyrights and Trademarks, and the House Judiciary Committee Subcommittee on Intellectual Property, are submitted as Exhibits 2 and 3.

II. THE FOUNDING OF DMX

9. In the mid-1970s and early 1980s, I began to develop the concept of delivery of music programming directly to residential subscribers and businesses. The growing popularity of the compact disc music delivery platform demonstrated consumer interest in better sonic quality. At that time, cable and satellite delivery of television and broadcast programming was commonplace. But, to my knowledge, there was no existing music service for the residential market. I therefore began to explore the viability of this concept and the availability of technology that could deliver diverse programming with exceptional fidelity, without the signal interference typically found in radio transmissions.

10. In 1986, I founded ICT to develop these concepts into a formal business enterprise. I have served as Chairman and Chief Executive Officer of ICT since its inception. ICT was renamed DMX Inc. in April 1995. Exhibits 4 through 9 are copies of the 1991-1994 Annual Reports for ICT, and the 1995 10-K filing and the most recent 10-Q filing for DMX Inc.

11. The initial business concept for DMX was to market a music programming "premium" channel delivered by a cable television service operator in much the same way that cable operators offer the Home Box Office ("HBO") or the Disney Channel video "premium" programming to the home subscriber. ICT would create the infrastructure to program the music content of the DMX service and would market the programming service directly to the cable service operator.

12. The cable service operator would undertake the expense of transmitting and marketing the service to consumers. Cable service suppliers would be required to purchase a tuner and a remote control unit for approximately \$150 per subscriber, and would be required to install a \$20,000 cable head-end to distribute the DMX signal to subscribers. Although a relatively small number of subscribers purchase the tuner and remote, typically a cable system operator recoups these equipment investments over time from subscriber revenues.

13. To help secure necessary relationships with cable operators who would deliver DMX to subscribers, ICT sought out and obtained as key investors prominent operators of multiple

cable services ("MSOs") including Tele-Communications, Inc., Viacom International, Inc., and Jones International, Inc.

14. To assist DMX as a start-up entity, I recruited as officers and directors executives with broad expertise and credibility in all fields critical to the success of DMX. These included former record company executives, a leading consultant in music programming, technology experts in digital audio transmission, and former executives in the fields of banking and investment.

III. OVERVIEW OF THE DMX SERVICE AND TECHNOLOGY

15. The residential DMX subscriber service generally consists of 30 channels of diverse music formats. Each DMX channel explores in depth a particular musical era or genre, without commercials, interruptions or announcements. Exhibit 10, "A Guide to DMX," is a current DMX brochure that describes the DMX service. Exhibit 11 lists the 30 music channels currently available to residential subscribers.

16. The DMX signal currently is delivered to the home in two ways. First, the DMX service is distributed as a "premium" channel service by cable television signal suppliers. The signal is uplinked from the DMX studio to a C-Band satellite, which then delivers the DMX programming directly to the cable operators' system head-end for distribution to subscribers. The subscriber pays the cable service operator a monthly fee, typically about \$4.95 per month for subscribers who purchase the tuner and remote control, and \$9.95 per month for those who rent the equipment. The cable service operator then pays DMX a per subscriber fee.

This is the method contemplated under the original business model for DMX.

17. The second delivery method, for the vast majority of DMX subscribers, is through the DBS system operated by PrimeStar Partners, L.P. DMX first was offered to PrimeStar subscribers beginning in October 1995. Beginning in January 1996, DMX became available to residential consumers on a very limited basis by DBS on the "DMX Direct" satellite service. For both these satellite delivery systems, the DMX studio uplinks to a Ku-Band satellite that delivers the signal directly to a satellite receiving dish at the subscriber's residence.

18. "Premium" cable service audio programming on DMX comprises 30 channels of uninterrupted selections for residential subscribers. PrimeStar DBS "basic" subscribers currently receive eight DMX channels as part of their basic television package. Exhibit 12 lists the current PrimeStar channel line-up. DMX Direct subscribers currently can receive the full 92 channels that otherwise are provided exclusively to commercial subscribers. Exhibit 13 lists the more than 90 channels that DMX currently programs for commercial subscribers and for the small number of residential DMX Direct subscribers. DMX anticipates at some point in the future that it will expand its channel offerings for the commercial market to 120 channels.

19. Subscribers can listen to only one channel at a time.

20. Programming on each particular channel is delivered simultaneously to all eligible subscribers. For example, the same "Classic Jazz" channel programming heard in Los Angeles is

heard at the same time in Washington, D.C. or abroad, whether delivered by cable or DBS.

21. The sophisticated and proprietary programming methodology used for each channel of DMX results from extensive research and audience ascertainment efforts. During 1993, DMX began programming using in-house programming staff responsible for music and consumer research, on-going acquisition of new material, programming, scheduling and interfacing with the Company's studio operations. DMX uses proprietary programming concepts, software and hardware to choose each selection according to 18 separate demographic factors and musical characteristics, so as to maximize favorable consumer response to the musical programming and to minimize jarring or annoying transitions.

22. Programming on DMX may repeat songs over the course of a day or a week. However, the program varies substantially each time, so that the same order of songs is not repeated.

23. DMX programming channels and services comply with the factors set forth in 17 U.S.C. § 114(d)(2) that qualify a digital subscription transmission for a statutory license:

a. DMX is not an interactive service. DMX programs its own service, and does not enable a member of the public to choose particular sound recordings to be transmitted.

b. DMX programming does not exceed the "sound recording performance complement."

c. DMX does not publish an advance program schedule and does not announce the sound recordings that it transmits (not before, during or after the transmission occurs).

d. DMX does not automatically and intentionally cause any device receiving the DMX residential service to switch from one program channel to another.

e. To the best of its knowledge, DMX includes in its transmission any title, artist or related information encoded in the sound recording.

24. DMX began its subscription music service transmissions in September 1991 to fewer than 25,000 monthly residential subscribers to the premium DMX service through September 30, 1992. Through September 30, 1993, that number increased by approximately 100,000; and, by September 30, 1994, by approximately another 125,000 subscribers. Whereas subscriber growth between 1992-93 had increased five-fold, and increased between 1993-94 by about 50 percent, growth of DMX as a premium service over the last two years has slowed to about 12 percent per year.

25. The actual penetration rate for the DMX premium service into the available market is small. DMX is potentially available as a premium service on more than 940 cable systems in the United States, representing more than 18 million cable households. Thus, the actual rate of penetration for DMX as a premium service is less than two percent (2%) of the total market available through DMX's affiliates.

26. Because of competitive pressures and the trend toward offering subscription music services as part of basic cable or DBS service, DMX expects that the penetration of DMX as a premium service will slow or potentially decline.

27. DMX has been able to reach a larger subscriber base of approximately 1.2 million residential subscribers through its recent agreement to offer DMX as part of the basic PrimeStar DBS service. DMX anticipates that the available subscriber base through DBS will increase in the near future.

28. As of July 31, 1996, fewer than 100 homes receive the 92-channel "DMX Direct" service by direct-to-home ("DTH") satellite transmission. DMX believes that number will not increase significantly in view of the many digital services available (e.g., DirecTV) that include audio in their product offering.

29. Exhibit 14 shows on an annual basis the average number of subscribers to each type of the DMX service.

Competition

30. DMX directly competes with other digital subscription services for affiliation relationships with cable and DBS suppliers, to increase the distribution of the DMX service to subscribers.

31. Affiliation between cable and satellite signal distributors and a particular digital audio subscription service generally involves a long-term commitment. A cable system must make substantial investments in head-end equipment and individual subscriber equipment (e.g., headend equipment, receivers and

remote controls) that are particular to the technology of the subscription service. Limited channel capacity currently precludes cable or satellite systems from concurrently offering two competing music services. The decision to affiliate with a particular music service is based primarily on factors such as the overall cost of the services (including hardware, technology, operating costs and monthly license fees), the relative quality and quantity of available programming, financial strength, quality of marketing to attract and retain subscribers, and technical reliability and performance.

32. Until recently, DMX's principal competition for these affiliations has been Digital Cable Radio Associates, L.P. ("DCR"), a limited partnership which markets the subscription service known as "Music Choice." DCR was founded in 1987. The DCR service was launched in May 1990, and has operated continuously since. Like DMX, DCR began as a premium cable service available to home subscribers over cable television systems. Currently, Music Choice is provided as a basic service on cable services nationally, and on the DSS system offered by DirecTV. Initially, DCR was a partnership owned by major cable service providers and Jerrold Communications, a division of General Instrument Corporation. Currently, a one-third joint venture interest in DCR is held by three major producers of sound recordings: Warner Music DCR, Inc., a subsidiary of Warner Music Group, Inc.; Sony Digital Radio, Inc., a subsidiary of Sony Music Entertainment, Inc.; and EMI Music Cable Radio, Inc., an

affiliate of EMI Music, Inc. Warner and Sony acquired their interests in DCR in 1993; EMI acquired its interest in 1994.

33. Muzak, L.L.P. recently entered the residential digital music subscription market with a service offered on the "Dish Network" DBS system. Muzak is well known as a supplier of background music to commercial establishments.

34. In the early 1990s, there was another digital cable subscription service known as "Digital Planet." That service was significantly undercapitalized and failed to attract substantial distribution by MSOs. Consequently, Digital Planet never attained a significant subscriber base, and went out of business in November 1992.

35. In the broadest sense, DMX and all digital audio subscription services compete for consumers' time; with respect to the DMX premium service, discretionary income with other home entertainment services. Digital audio subscription services more directly compete with broadcast music programming -- primarily radio and, secondarily, music-oriented television programming.

IV. DMX PROMOTES THE INTERESTS OF RECORDING COMPANIES AND THE SALE OF RECORDED MUSIC.

36. As a former chief executive of two recording companies, I intentionally designed DMX programming in a fashion that I believed would promote the interests of performing artists and recording companies:

a. The diversity of channels on DMX exposes our subscribers to a broad spectrum of musical styles that otherwise would receive little or no airplay in the United States. In addition to pop and rock channels, for example,

the DMX residential service features two channels of classical music, three channels of jazz, two channels of country music, and channels devoted to blues, rap, reggae, salsa, gospel and inspirational music. A few public or college radio stations may program a few hours of these types of music each week; DMX plays them 24 hours a day.

b. Diversity of programming means diversity of recordings. The DMX music library includes more than one million compact disc recordings and constantly is growing. On any particular channel, some 2700 different cuts will be "in rotation" on a weekly basis.

c. Diversity of programming also means exposure of a large number of artists.

d. DMX exposes to a national audience artists that receive radio airplay or concert exposure primarily in particular regions of the country.

These programming factors show how DMX and other subscription services can be instrumental in creating and expanding markets for recorded music, and in promoting sales of particular recordings and of the catalog of recordings performed by particular artists.

37. DMX created an innovative technology to provide listeners with complete information about the recordings and artists they hear on DMX. Along with the DMX tuner, subscribers can receive the "DMX DJ Remote," a remote control device specifically designed to provide valuable information about the recordings and performers heard on DMX. In addition to channel

selection buttons, the DMX DJ Remote features a liquid crystal display ("LCD") screen and a "View" button. By pressing the "View" button, the LCD screen shows the title of the musical composition being performed, the featured artist, the composer(s), the title of the album from which the selection is being performed, the name of the label that published the recording, and the catalog number of the recording. Much more detailed information about the performed music is delivered to the consumer via DMX than typically is given to radio or television audiences, and whenever the consumer wishes to receive it. It was my intention to provide information to enable any subscriber to visit any record store -- in person, by telephone, by mail-order or on-line -- and purchase any recording performed on the DMX service. Brochures and materials that describe the "DM2000" tuner and the operation of the DMX DJ Remote are submitted as Exhibits 15 and 16.

38. While these concepts and technologies promote awareness of recording artists and record sales, I also adopted from the outset, as a matter of principle, programming policies that I believed would not threaten or displace recording sales.

- a. DMX never performs entire albums.
- b. DMX never performs two cuts in a row from the same album.
- c. DMX never performs "blocks" of cuts by particular performers.
- d. DMX never engages in overly repetitive programming -- even of the most popular recordings.

e. DMX never publishes program guides, nor advertises or announces when it will play particular compositions or performances.

39. DMX voluntarily created and instituted these policies. I had offered to discuss these policies with RIAA Chairman Jason Berman so as to potentially establish them as guidelines for the subscription music industry, but he did not respond to my invitation.

40. Although issues of home taping have been resolved by Congress in the Audio Home Recording Act of 1992, DMX does not promote consumer home taping. First, consumers do not know when particular selections are to be performed, and are unlikely to stand around a recorder hoping that a song they may want to tape might sometime be played. Second, DMX does not program "artist specials" or play entire albums, which some consumers might wish to tape. Third, since DMX listeners are able to tune in at any time to hear a particular genre of music that they like, they have no need to record the programming -- it is always there.

V. INVESTMENTS TO BRING DMX TO MARKET AND TO DATE

41. As a start-up business in a new industry, DMX was required to invest heavily to bring the business to market and to continue to upgrade and expand the service and affiliation base. Among the principal costs to DMX have been the acquisition of technology, research and development, and property and equipment, including particularly studio equipment, computer systems, music library, furniture and office equipment. Total investments in DMX, from inception to the present, exceed \$100 million.

Technology Investments

42. ICT acquired exclusive license rights in 1986 to a proprietary data compression technology for the digital transmission of music with quality comparable to an audio compact disc. The technology is known as "DM" which stands for "digital modulation." Under an agreement between ICT and the licensor, Fredricksen & Shu Laboratories, Inc. ("FSLI"), ICT was obligated to fund the development of the technology. Prior to the launch of the DMX service, ICT paid FSLI approximately \$550,000 in compensation, consisting of cash payments of \$131,118 and shares of ICT common stock valued at \$428,000.

43. In 1990, ICT entered into an agreement with Scientific-Atlanta, Inc. ("S-A") to enhance and further develop the FSLI DM technology. The resulting jointly-developed technology is known as the CD-X Audio System. ICT also contracted with S-A to develop and produce the DM2000 digital receiver for the DMX music signal. The DM2000 tuner connects to the home cable system using coaxial cable, and provides industry standard consumer audio output jacks to connect to the subscriber's stereo system. Pursuant to a February 1991 agreement, S-A became the exclusive manufacturer of the DM2000 tuner. The tuner is sold by S-A directly to the cable operator that markets the DMX service to the consumer. S-A also developed for DMX two remote control units for the DM2000 tuner; one device with basic channel functions, and the more functional DMX DJ Remote. In consideration of the development of the transmission and reception technology, DMX has agreed to pay fees to S-A from 1991

through August 1996. Exhibits 17 and 18 set forth the fees owed to S-A.

44. DMX also has been required to invest substantial capital in property and equipment. These amounts are reflected in Exhibits 4-9, on Exhibit 19, and in Exhibit 30(a).

VI. DMX EXPENSES

45. Office Space/Monthly Rent DMX corporate headquarters occupies two floors of commercial office space in Los Angeles, California. In addition, DMX has commercial sales offices in Chicago, Illinois, Irvine, California, Marietta, Georgia, Royal Oak, Michigan, Scottsdale, Arizona, and Seattle, Washington. Our engineering facilities are located in Torrance, California. DMX's satellite uplinking facility is in Littleton, Colorado. We also have two residential service sales offices in New York, New York and Seattle, Washington. Monthly rental for these properties as of September, 1996, is set forth on Exhibit 20.

46. Employment Costs As of September 30, 1995, DMX had 145 full-time employees: 53 in administration, 58 in sales and marketing, 27 in studio and programming and 7 in engineering. Since that time, DMX has substantially downsized and reordered its organization. As a result, as of September 1, 1996, DMX has 27 employees in administration, 64 in sales and marketing, 31 in studio and programming, and 7 in engineering. The total amount of DMX's payroll from October 1, 1995 through September 1, 1996 is set forth in Exhibit 21.

47. Transmission Costs DMX incurs monthly charges for satellite transmission of its signal to cable suppliers, as follows:

a. To enable premium cable delivery service, DMX subleases space on a domestic communications satellite known as Satcom C-3, Transponder 24, from Western Telecommunications, Inc. ("WTCI"), which in turn has leased the satellite transponder from GE American Communications, Inc. Effective April 1, 1993, DMX pays WTCI a monthly subleasing fee, and an additional monthly management fee. DMX also pays a monthly uplinking fee for U.S. domestic C-Band transmission services.

b. To enable DBS transmission of the DMX service, DMX subleases space on a domestic Ku-Band satellite known as AT&T Telstar 402R, from WTCI, which in turn has leased the satellite transponder service from AT&T SKYNET. DMX pays WTCI a monthly fee for this sublease, which includes WTCI's transponder costs plus a management fee. DMX also pays a monthly uplinking fee of for U.S. domestic Ku-Band transmission services.

Exhibit 22 shows DMX's annual costs for transmitting its service from 1991 through the present.

48. Sales and Marketing DMX engages in extensive sales and marketing efforts. With respect to the residential market, the primary direct-to-consumer marketing and sales activities are performed by the cable or DBS provider. As such, DMX's sales and marketing activities for residential markets consists primarily

of providing appropriate materials to the cable or DBS providers and general advertising to promote the DMX name and service. These efforts to build and enhance the DMX name as a brand name consumer product and music service are necessary to establish and foster relationships with third-party service providers who will increase distribution and demand for the DMX service. Since 1988, DMX has spent close to \$35 million on sales and marketing expenses. A specific breakdown of these expenses on an annual basis is shown in Exhibit 17.

49. Equipment Costs In July 1993, DMX entered a four-year agreement with Comstream Corporation to manufacture the "DR-200" direct broadcast satellite audio receiver used for DBS reception of DMX. A copy of a brochure showing and describing this technology is submitted as Exhibit 23. Payments to Comstream from October 1993 through the present are set forth in Exhibit 18.

50. Other Technology Costs During 1994, DMX licensed from Dolby Laboratories, Inc. the Dolby AC-3 digital audio compression algorithm for use in digital transmissions. The AC-3 system has been adopted by numerous manufacturers of set-top boxes for digital reception of television signals. DMX pays to Dolby a license fee for incorporation of this technology. The total amount of these payments is set forth in Exhibit 18.

51. These and other operating expenses are reflected in Exhibit 30(b).

52. License Fees for Musical Compositions DMX pays licensing royalties to music publishers for the performance of

musical compositions on the DMX service to the three major collecting societies. The royalty rates paid to these entities since 1991 are set forth in license agreements submitted herewith as:

a. Exhibit 24: A letter dated December 20, 1991, from the American Society of Composers, Authors and Publishers ("ASCAP") setting forth the interim fee for residential subscribers established in a court proceeding for all premium cable services, including DMX.

b.(1) Exhibit 25: A license agreement between DMX and Broadcast Music Incorporated ("BMI") between October 1, 1991, and September 4, 1994.

(2) Exhibit 26: A license agreement between DMX and BMI covering the period through October 1994 and September 30, 1999.

c. Exhibit 27: A license agreement between DMX and SESAC from December 26, 1991.

Music licensing revenues for residential operations paid by DMX on an annual basis since 1991 are set forth in Exhibit 14.

53. Capital Resources and Costs Historically, DMX funded the launch and expansion of operations through the sale of common stock. The Company trades on the NASDAQ Small Capital Market system under the symbol TUNE. Since DMX stock began trading in October 1990, the price per share of DMX common stock has fallen from a high of 9-1/4 to its current value of approximately 1-11/16. Exhibit 28 shows the quarterly high and low prices of DMX stock. To date, no dividends have been paid by the company. As

a result, while DMX management believes that the company has access to additional debt or equity financing, there can be no assurance that such financing will be obtained. In recent months, management has taken steps to reduce operating expenses and capital spending in order to extend working capital, including cutbacks in general and administrative expenses and the operation of DMX subsidiaries.

VII. LOSSES FROM OPERATIONS

54. Since its inception, DMX has never shown a profit, and has incurred substantial operating losses from domestic operations. Detailed statements of operating losses are set forth in the Annual Reports, 10-K and 10-Q reports submitted as Exhibits 4 through 9. As shown on Exhibit 29, total operating losses of DMX through June 30, 1996 exceed \$120 million, of which approximately \$82 million is from residential operations. Graphic representations of these losses are shown as Exhibit 30(c) and (d).

VIII. DMX RESIDENTIAL REVENUES

55. Annual residential subscriber revenues from U.S. operations from 1991 through the present are set forth in Exhibit 14 according to the type of service provided. Subscriber numbers and revenues are shown on Exhibit 30(e) and (f).

56. Subscriber revenues generally are paid to DMX by cable and DBS systems under affiliation agreements, as follows:

a. Currently, DMX receives from the cable service operator a monthly fee per subscriber to the DMX premium service.

b. For DBS subscriptions through the PrimeStar system, DMX currently is paid a small fee per month per subscriber. After the earlier of September 30, 1997 or the date when PrimeStar converts to a higher-power satellite, PrimeStar will offer up to 30 DMX channels as a basic service and will slightly increase the fee paid to DMX per month per subscriber. When PrimeStar becomes available on a higher-powered satellite, PrimeStar also will offer a premium DMX service of at least 30 channels and pay DMX approximately the same per subscriber fee as is paid by cable service operators offering the DMX premium service. The agreement remains in effect through January 25, 2001, unless terminated sooner.

c. The 92 current residential DMX Direct subscribers pay DMX \$15 per month with an annual prepaid subscription, or \$20 monthly.

IX. THE CHANGING BUSINESS MODEL FOR SUBSCRIPTION SERVICES

57. When I founded ICT in the mid-1980s, the concept of a digital music subscription service was new and untested, and potential success was uncertain. I continue to be optimistic that such services can succeed, but my optimism is tempered by five years of operating experience, the failures of other competitors, and new and imminent competitive pressures.

58. ICT launched Digital Music Express in March 1991, and began marketing the DMX service in August 1991. The suggested retail price of the service to the residential consumer was \$9.95 per month, using as a model the typical pricing for premium cable

television channels. In marketing the DMX service to cable suppliers, ICT suggested that approximately half of this monthly fee would be used to amortize the supplier's hardware investment (which would be captured after about two and one-half years). The other half of the monthly fee would be split between the cable supplier and DMX, such that DMX would receive about \$2.50 per subscriber per month. At that rate, DMX had projected that it might reach a break-even point with between 500,000-700,000 residential premium cable subscriptions, anticipating a revenue stream from domestic residential subscribers of approximately \$20 million.

59. After five years of operation, DMX has not reached that "break-even" level of market penetration in premium services. Despite the fact that DMX is potentially available as a premium service to more than 18 million cable households in the United States, DMX has only been able to achieve about 303,000 premium subscriptions. Competitive pressures and rapid changes in the overall marketplace portend that premium subscription revenues may decline in the future.

60. Specifically, the trend among cable suppliers and their customers is to include subscription music programming as part of the basic subscription service. This "basic service" model first was adopted by Music Choice. Inasmuch as fees for basic service typically encompass between 30 and 60 channels of television programming in addition to audio programming, for a typical fee of approximately \$20 per month, the potential "basic cable"

remuneration to a subscription music service is exponentially lower than the "premium" rate.

61. Another significant change to the overall marketplace that occurred within the past two years is the trend away from cable services toward DBS delivery to the residential consumer. Music Choice was the first digital audio service offered in this manner, as part of the basic DirecTV DSS service. As a result, consumers now expect that their monthly fee for basic DBS service will include some number of channels of digital audio service. At the moment PrimeStar offers only eight DMX channels as part of its basic service; however, that number is expected to increase to all 30 premium channels as part of the basic PrimeStar service. Muzak, similarly, is offering all 30 of its channels as part of the Dish Network.

62. During its first year of operation, the DirecTV DSS system attracted more than one million subscribers. Current estimates suggest that DirecTV has about 1.8 million subscribers and PrimeStar has nearly 1.4 million subscribers. In recent months, as competing systems have been introduced by other programming and hardware suppliers, prices for the required dish, and set-top box hardware rapidly have begun to decline. Recent entrants, such as the Dish Network, have slashed hardware prices to less than one-third of their introduction price, and are exerting strong competitive pressure to lower monthly fees as well. As a result, estimates show that the Dish Network has within five months of operation climbed to approximately 133,000 subscribers -- even before the price war began. DMX anticipates

that in the near future, the price of monthly DBS service will continue to decline.

63. Improved cable delivery services also are on the way. For example, TCI plans in October 1996 to begin service on its digital "Headend In The Sky" or "HITS," which will deliver cable television service and perhaps as many as 40 channels of DMX to digital cable service subscribers. This new service, we believe, will provide strong competition to DBS in terms of channel capacity and quality. However, the service will require a new generation of digital cable set-top receivers. This may increase the cost of the service to the consumer as well as to the cable service. Therefore, while HITS may increase DMX subscribership, it is likely that the bulk of these subscribers will be at the "basic" level, as is the case with DBS, and that most of these subscribers will not be "new" subscribers to cable; they predominantly will be existing subscribers who trade in their current analog cable television receiving equipment and subscription for a better digital system.

64. Another "wild card" in this marketplace is the impact of cable and communications deregulation. In the near future, services currently offered via cable or DBS services will be offered by what previously were considered to be "telephone companies" and via electronic telecommunications networks such as the Internet. These additional modes of delivery will again exert competitive pressure on the marketplace and will likely result in erosion of the initial "premium service" concept of DMX and digital subscription services generally.

65. The advent of digital audio radio broadcasting is further anticipated to exert competitive pressures on license fees that digital subscription services receive from cable suppliers. Radio broadcasts currently are delivered as analog AM or FM signals, and largely are supported by advertising or, in the case of public radio, by grants and contributions. Once radio stations begin broadcasting digitally, these stations will become more competitive with digital subscription services in terms of signal quality. It also is likely that they will seek to expand their audience by competing for bandwidth on cable, DBS and other transmission services. The availability of such alternative sources of funding could enable these stations to offer their signals to cable and DBS affiliates for lower prices than those currently paid to digital subscription services, and so could further depress prices currently paid by cable and DBS services to DMX.

66. Another potential entrant is CD Radio, Inc., which has been working toward nationwide satellite delivery of a 30-channel digital music service plus 20 channels of specialized news, talk and sports. CD Radio's license has been pending before the FCC since the early 1990's. Initially, CD Radio will be broadcast to car radios but it is possible that the service will expand to the home.

67. The likely result of these competitive pressures in this rapidly-changing marketplace for music subscription services, in my view, is:

a. The premium cable service aspect of the business likely will remain static or decline.

b. Premium DBS subscriptions will increase modestly, but then will level off.

c. Basic subscriptions to digital music services will increase significantly along with the market for DBS systems in general. However, fees paid by signal suppliers to music subscription services likely will remain at current levels for "basic" service or will decline.

d. With the advent of new technologies and competitors, the number of subscribers again may increase, but license fees paid to subscription services by these suppliers will remain at "basic" levels or will decline.

68. In sum, the total number of subscribers to DMX will increase, but because that increase will come almost exclusively in "basic" service (and at the expense of "premium" services) the average revenue per subscriber will substantially decrease. This is shown in Exhibit 30(g). As a result, the "break-even" point for residential subscription revenues remains elusive.

X. AN APPROPRIATE AND REASONABLE ROYALTY RATE WOULD BE NO HIGHER THAN TWO PERCENT.

69. As a former record company executive and financial manager for recording artists, I believe that record companies and performers should receive reasonable compensation for the performance of sound recordings. A number of factors, described below, affect the reasonableness of the rate of compensation. DMX believes that compensation, taking into account all of these

factors, should result in a royalty of less than two percent of gross revenues received by DMX from residential subscriptions.

Any Royalties Will Increase Operating Losses; High Royalties Threaten DMX's Viability.

70. As detailed above, DMX has incurred exceptionally high start-up costs and operating losses. We remain optimistic that we will reach a point of modest profitability within a few years through reduced costs and slow expansion of revenues. But the ultimate success of the digital music subscription business and of DMX in particular are not assured. This is a new and unproven business.

71. Even when DMX breaks even and begins to show profit, that money is needed as working capital -- to fund ongoing operations, expansion of the service, technological improvements and innovation, and increased sales and marketing. In addition, such profits are needed to provide some financial return to those who have invested more than \$100 million to bring DMX to its present status; this, in turn, will help attract new needed capital for DMX.

72. A modest royalty fee imposed at this point would inflate the net operating losses of DMX and postpone DMX's ability to break even or reach profitability. A substantial royalty fee would threaten the eventual success of DMX and, potentially, could destroy the viability of DMX or the subscription music business in general. Therefore, any royalty should be set low enough to permit DMX to reach profitability, attain financial stability, fund ongoing operations, provide a return on past investments and attract new capital.

DMX Cannot Raise Its Fees to Affiliates

73. DMX cannot simply pass on or increase its fees to cable and DBS service operators in response to any royalties adopted by the Panel.

74. Cable systems that offer DMX as a premium service must price DMX at a competitive rate in order to attract consumer subscriptions. In general, the maximum amount that the market may bear is \$9.95 per month. Before committing to the substantial hardware investments necessary to carry and deliver DMX, these MSOs needed to know their potential gross margin. DMX understood that to induce these services to make the required significant investments in infrastructure and equipment, DMX had to provide sufficient incentive and certainty to the services. Therefore, DMX agreed that approximately half of the fees (\$4.95) should be retained by the cable system to amortize the equipment costs (which DMX estimated would occur after approximately three years), and that the remaining \$5.00 would be split between DMX and the MSO.

75. Cable and DBS systems that offer DMX as a basic service also must maintain margins. These systems must pay for all channels offered to the consumer. According to the 1996 TV and Cable Factbook, cable services are about evenly divided between those that can provide between 30 and 54 channels and those that can provide more. All of these channels must compete for space on the basic or enhanced MSO systems. Channels regularly are dropped or added by MSOs for competitive reasons -- including cost.

76. Regulation of cable services, including the 1992 Cable Act, increased pressure on cable systems to lower prices and significantly constrained their ability to raise pricing.

77. Statistics and experience show that the market for pay television is slowly expanding. As a result cable services cannot easily expand their subscriber bases in order to increase revenues. Cable systems have reached the limits of geographic expansion in the domestic market. According to the 1996 TV and Cable Factbook, the number of operating systems in the United States has been virtually unchanged over the last three years. Penetration into that market also has been fairly static at about 60-65% of available homes.

78. Competition from DBS systems and, soon, telephone companies, threatens to take away market share from cable companies rather than expand the market base for all pay television. The war between cable and DBS services is being waged primarily on price. Surveys indicate that many consumers would switch from cable to satellite service if the costs were more competitive. With the recent plunge in prices of DBS hardware and service, the economic pressures on the MSO and DBS services are intensifying. For example, TCI -- DMX's primary affiliate and the largest single investor in DMX -- recently announced significant losses and, in response, new efforts to cut all possible costs as much as five percent across the board.

79. Thus, MSOs and DBS operators cannot afford any increases in cost that could squeeze their margins. Certain of DMX's affiliation agreements may permit cost of living

adjustments or possible adjustments in response to cost increases. However, the MSOs and DBS operators consistently have rejected requests by DMX to increase fees.

80. The business reality is that DMX needs these MSOs and DBS systems to distribute the DMX signal. DMX has insufficient leverage to increase prices, and believes it will be unable to pass on the costs of the sound recording performance royalties by raising fees.

DMX Promotes Exposure and Purchasing of Recorded Music.

81. DMX believes that a low royalty rate should not merely be viewed by the Panel as a short-term or interim rate. One of the primary reasons supporting a low royalty rate into the future is the promotional impact of DMX on the sale of recorded music.

82. DMX performs a wider selection of sound recordings than radio. We consistently expose new artists and niche and alternative musical genres that otherwise receive little or no radio exposure and achieve low record sales.

83. To promote the exposure of recordings and artists on DMX, all major record companies and many significant independent record companies provide us with free "promotional use only" sound recordings. This is the same practice that record companies traditionally have used to promote recordings for airplay on radio stations. A list of record companies (not including their many affiliates and subsidiaries) that regularly provide promotional recordings to DMX is attached as Exhibit 31.

84. Airplay of sound recordings undeniably promotes the purchase of sound recordings, concert tickets and related

products, to the benefit of record companies and performing artists. As recognized in the report of the Senate Judiciary Committee, "the sale of many sound recordings and the careers of many performers have benefitted considerably from airplay and other promotional activities provided by both noncommercial and advertiser-supported, free over-the-air broadcasting." S. Rep. 104-128 at 14-15.

85. DMX has yet to reach the penetration level of broadcasting. Yet, the impact of digital subscription services in promoting sales of sound recordings is beginning to be felt, and the potential promotional impact is extremely promising. The promotional potential of DMX has been acknowledged to me by record company executives, including executives of Time-Warner and Sony Music who, for a period of months, negotiated to invest in DMX. And, it is evident in the substantial investment by three major record companies in Music Choice. At the time of that investment, Michael Schulhof (then vice chairman of Sony U.S.A., Inc.) was quoted as saying, "We can expose more listeners to more forms of music and, we hope, drive them into stores to buy our product. Traditional radio is very limiting." Similarly, when EMI subsequently invested in DCR, EMI President and Chief Executive James Fifield was quoted as saying, "We're interested in keeping abreast of emerging technologies, and this is a way for us to help expose people to music that they might not otherwise hear on regularly formatted radio"; and that he had "always been interested in digital cable to promote new music.... I think [digital cable] will increase awareness and demand for

new music." Copies of articles including these statements are submitted as Exhibit 32.

86. The audience for DMX, particularly for the DMX premium service, is more interested in music than the typical consumer. The availability of diverse and alternative music and formats is one of the significant factors that drives consumer demand for DMX. That is why PrimeStar's limited offering of eight DMX channels includes niche music channels in addition to pop hits.

87. DMX has received many testimonials and listener comments indicating that DMX subscribers purchased recordings by artists that they first heard on DMX channels and learned of via the DMX DJ Remote. The general response of callers to the DMX 800 telephone comment line has been that those who were significant purchasers of recorded music before acquiring the DMX service have actually increased their purchasing since acquiring DMX -- often substantially. Typical of this response is the article from the July 1995 issue of Stereo Review, in which the reviewer wrote:

Warning: DMX can take a toll on your bank account. Monthly subscription costs run anywhere from \$8.95 to \$12.95, determined by the cable company, but what really gets me in trouble is buying all the CD's I decide I can't live without after getting a taste of them on DMX.

A copy of this article is attached as Exhibit 33.

88. DMX also addresses a long-standing complaint by record companies and the RIAA that radio stations inadequately identify recordings, and often fail to pre-announce and/or back-announce songs and artists. While DMX has no "announcements" per se, the DMX listener at any time can learn detailed information about the

musical program by using the DMX DJ remote control. As previously noted, I specifically designed the DMX service and the DMX DJ Remote to give subscribers all the information they need to purchase any recording they hear on DMX in any record store, or via mail-order, telephone service or (now) Internet. This device is extremely popular with DMX subscribers.

Overwhelmingly, consumers order the DMX DJ Remote over the less functional alternative remote, and purchase the DMX DJ Remote twice as often as tuners. Consistently, the DMX DJ Remote has been cited in press reports as a major feature of the DMX service.

89. Because DMX programming and technologies are more friendly to the interests of the recording industry and performers, in many respects DMX is a better promotional tool than broadcast radio.

90. Copies of articles referring to the promotional aspects of DMX and the DMX DJ Remote are attached as Exhibit 34.

DMX Competitors in Broadcast Radio Pay No Royalty and Have No Programming Restrictions.

91. As a matter of fundamental fairness, the Panel should not ignore that a primary competitor of digital subscription music services -- broadcast radio -- shoulders none of the burdens or restrictions placed on subscription services under the Act. Despite their commercial exploitation of and reliance on sound recordings, radio stations pay no performance royalty whatsoever to record companies or performers. The Act and its legislative history virtually assure that this inequity will continue even after radio broadcasting goes digital.

92. Moreover, the Act does not subject radio broadcasters to any of the programming restrictions imposed upon subscription music services. Radio can play albums in their entirety, play artist blocks and play requests -- DMX cannot. Broadcasters can promote these events through on-air advertising, newspapers and program guides -- DMX cannot. Radio stations can repeat the hottest hit records many times during the day -- DMX cannot. While I voluntarily shunned these programming practices for DMX, out of respect for the recording industry and performing artists, I nevertheless recognize that the programming restrictions in the Act make radio more competitive against DMX by giving broadcasters additional tools to attract listeners which are denied by law to all subscription services.

93. These financial and competitive inequities fundamentally distort the competitive marketplace between these two competitors, and further justify a low royalty rate.

Past Agreements Support Two Percent as a Maximum Reasonable Royalty

94. The three identical agreements between three major recording companies and Music Choice (the "DCR license") indicate that two percent (2%) of gross revenues received by the service would be a reasonable maximum royalty rate. But that agreement, and the history behind it, further evidences that the agreed rate is higher than a fairly negotiated rate would be. A lower rate would be justified and appropriate, but in any event the two percent rate should be viewed by this Panel as a maximum rate.

95. Beginning around May of 1992, I engaged in discussions with two recording companies -- Time-Warner and Sony Music --

that were interested in acquiring a minority shareholder interest in DMX. Over a period of several months, we engaged in substantive discussions concerning these potential investments and they provided me with draft agreements for my review and potential execution.

96. As an express condition of any investment opportunity, Time-Warner and Sony Music said that they would require DMX to sign a performance rights license providing royalties for the performance of their copyrighted sound recordings.

97. These recording companies provided me with a draft performance license that I was told was agreed to by both companies and that both companies considered to be fair. The royalty rate that they proposed in the agreement was two percent (2%) of gross revenues multiplied by the percentage of recordings performed by DMX that were controlled by those companies.

98. I was never told by anyone on behalf of Time-Warner or Sony Music that the rate was intentionally low because of other potential returns on their investment. To the contrary, it was my understanding that this license was to be separate and apart from any other return on investment to these companies.

99. I believed that this rate was unduly high. However, I recognized that these companies held the leverage to extract a two percent rate from DMX. I had no leverage to negotiate a lower rate, inasmuch as complaints about the proposed rate would jeopardize any possibility of DMX obtaining much-needed capital from these companies.

100. The license as originally proposed was for a 25-year term, but had a clause stating that if legislation passed enacting a performance right, the royalty would be the higher of the two percent license rate or the rate enacted by statute. I replied that I would agree either to two percent or the statutory rate, but would not agree to a contingency. The companies responded by agreeing to lock in the two percent (2%) rate over the 25-year term without regard to any legislated rate.

101. Based on these negotiations, I had understood that Time-Warner and Sony Music had proposed terms for a performance license that they considered to be fair. Ultimately, for unrelated reasons, DMX elected not to go forward with the investment opportunity offered by these companies.

102. I also would note that this negotiation provides evidence that a low rate should not be viewed simply as an interim rate. The 25-year term of the offered license -- as ultimately accepted in the DCR agreements -- indicates that these three recording companies believed two percent was a fair rate for a very long term. In my negotiations with Time-Warner and Sony Music, the companies never indicated to me that the two percent rate was artificially deflated so as to allow DMX to establish itself in the market.

103. Several differences between the DCR license and the statutory license under the Act make the statutory license less valuable to a music service:

- a. The DCR license permits the accrual of fees without requiring payment or interest payments until the

service became profitable. The deferral opportunity constitutes an immense value to nascent programming services in terms of increasing cash flow, freeing capital for other investments and securing the ability of services to attain profitability. The Act contains no provision for deferral of payments.

b. Programming restrictions in the DCR license are less restrictive than those imposed as a condition of statutory licensing under the Act. For example, under the Act, DMX cannot play an entire symphony whereas the DCR license permits such commonplace programming.

c. Unlike the Act, the DCR license imposes no restrictions on technology (e.g., switching of channels).

d. Also, the DCR license requires the affiliated record companies to provide copies of sound recordings to DCR, while the Act does not. Costs of sound recordings are substantial. DMX receives promotional recordings from most record companies, but still has paid more than \$880,000 to amass its record library.

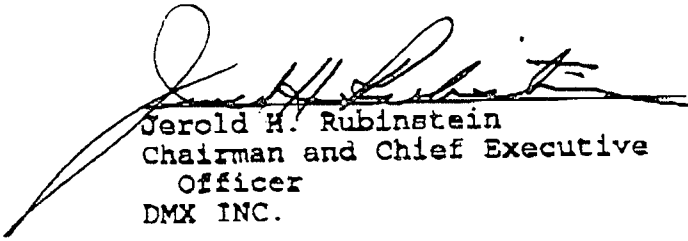
In these respects, the subscription service receives less flexibility and, in my view, less value under the statutory license than under the DCR license. This would warrant a statutory rate lower than the two percent rate in the DCR license.

104. Finally, the Panel should take into account the impact of section 114(h) of the Act. This section obligates these three recording companies to offer no less favorable terms than those

in the DCR license to all other subscription entities offering similar services. Of course, should the statutory rate be less than two percent, then any other service would be able to elect between the certainty of a long-term license at the DCR license rate and the risks and benefits of a lower statutory rate subject to possible revision thereafter. However, to prevent unfairness to the recording companies and pricing distortions in the marketplace, the statutory rate should be no higher than the DCR license rate.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge.

September 9, 1996



Jerold H. Rubinstein
Chairman and Chief Executive
Officer
DMX INC.